

Test Procedure for §170.302(e) (2) Calculate and Display Body Mass Index

This document describes the draft test procedure for evaluating conformance of complete EHRs or EHR modules to the certification criteria defined in 45 CFR Part 170 Subpart C of the Interim Final Rule (IFR) as published in the Federal Register on January 13, 2010. The document is organized by test procedure and derived test requirements with traceability to the normative certification criteria as described in the Test Procedure Overview document located at <http://healthcare.nist.gov>. These test procedures will be updated to reflect the certification criteria defined in the ONC Final Rule.

CERTIFICATION CRITERIA

§170.302 General certification criteria for Complete EHRs or EHR Modules

(e) Record and chart vital signs

(2) Calculate body mass index. Automatically calculate and display body mass index (BMI) based on a patient's height and weight.

INFORMATIVE TEST DESCRIPTION

This section provides an informative description of how the test procedure is organized and conducted. It is not intended to provide normative statements of the certification requirements.

This test evaluates the capability of a Complete EHR or combination of EHR Modules to automatically calculate and display a patient's body mass index (BMI) using a patient's height and weight. The test procedure consists of one section:

- Calculate and display - evaluates the capability to calculate and display BMI based on a patient's height and weight
 - The Tester enters the NIST-supplied height and weight data
 - The Tester validates that the BMI is displayed and calculated correctly from the entered height and weight

REFERENCED STANDARDS

None

NORMATIVE TEST PROCEDURES

Derived Test Requirement(s)

DTR170.302.e.2 - 1: Calculate and display body mass index

Required Vendor Information

VE170.302.e.2 - 1.01: Vendor shall identify a patient with an existing record in the EHR to be used for this test

VE170.302.e.2 - 1.02: Vendor shall identify the EHR function(s) that are available to select the patient, enter the patient's height and weight, and calculate and display BMI.

Required Test Procedure

- TE170.302.e.2 - 1.01: Tester shall select height and weight test data from NIST-supplied test data sets
- TE170.302.e.2 - 1.02: Using the EHR function(s) identified by the Vendor, the Tester shall select the patient's existing record and enter the patient's height and weight
- TE170.302.e.2 - 1.03: Using the NIST-supplied Inspection Test Guide, the Tester shall verify that the test data has been entered correctly and without omission and that the BMI has been calculated correctly according to the NIST-supplied data set

Inspection Test Guide

- IN170.302.e.2 – 1.01: Tester shall verify that the required units of measure are displayed or can be selected at the time the height and weight are entered.
- IN170.302.e.2 – 1.02: Tester shall verify that the height and weight test data can be entered correctly and without omission.
- IN170.302.e.2 – 1.03: Using the NIST-supplied data sets, the Tester shall verify that the BMI is calculated correctly from the entered height and weight and is displayed without omission and without error. Calculated BMI may deviate +/- 1.0 from the calculated value in the data set.

EXAMPLE TEST DATA

Height: 5 ft 6 in OR 1.67 meters
Weight: 135 lbs OR 61.2 KG
BMI: 21.8

Height: 5 ft 3 in OR 1.60 meters
Weight: 130 lbs OR 59 Kg
BMI: 23

Height: 6 ft 2 in OR 1.88 meters
Weight: 210 lbs OR 95.3 Kg
BMI: 27

CONFORMANCE TEST TOOLS

None